## **DRAWINGS**

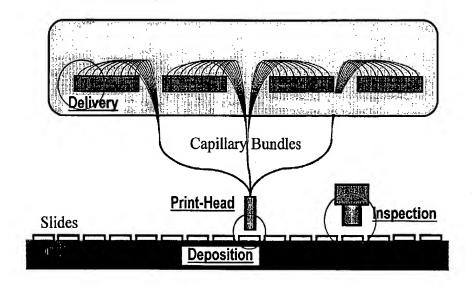


Figure 1. Schematic configuration of invented microarray fabrication system

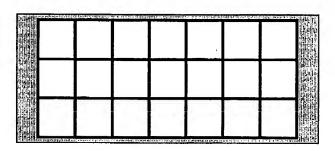


Figure 2. Configuration of a print-heat assembled from an orderly matrix of capillary bundles

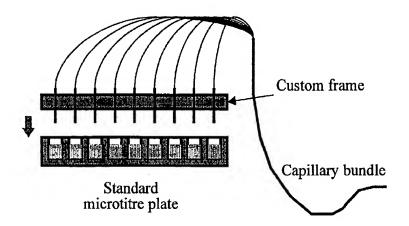


Figure 3. A random capillary bundle permanently linked to a frame, which holds the capillaries in a spatial grid mirroring a standard microplate

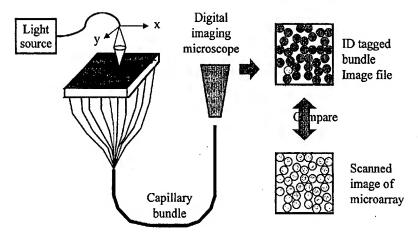


Figure 4 The setups and procedure for capillary ID registration and probe identification

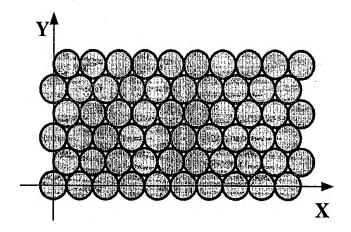


Figure 5 Capillary identity recording using a XY coordinate system for orderly honeycomb patterned or near orderly patterned bundles

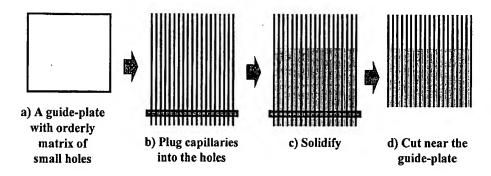


Figure 6 Fabrication of assembled capillary bundle using guide-plate method

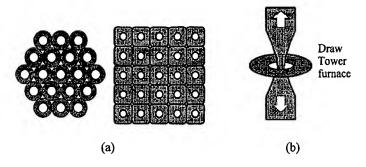


Figure 7 Fabrication of unitary capillary bundle

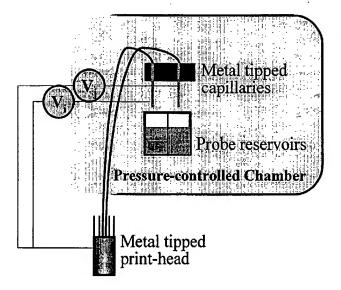


Figure 8 Flow control in individual capillaries using combined air pressure and electric field driving forces

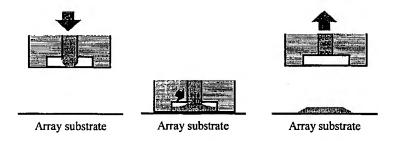


Figure 9. Probe deposition by mechanical tapping

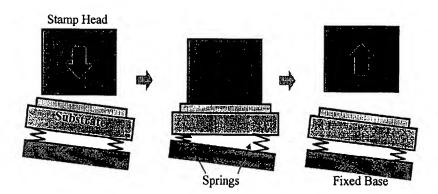


Figure 10 Ensuring perfect matching between stamp head and substrate

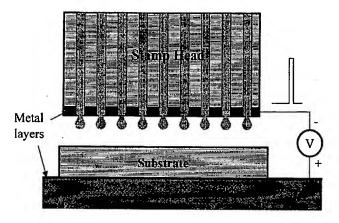


Figure 11 Probe deposition by electrostatic printing

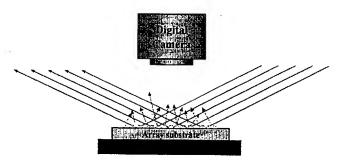


Figure 12 Microarray inspection system based on scattering

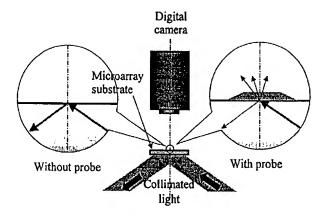


Figure 13 Microarray inspection system based on total internal reflection

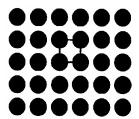


Figure 14 A

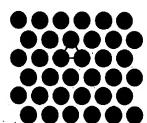


Figure 14 B